**IT Applications Unit 3, AOS 1, Online Communities**

1. Complete the following, from pgs, 32: **Network security**

**Networks are classified according to below and we will study the following:**

1. Network Categories: LAN, WAN
2. Network Architecture, client-server; peer-to-peer; internet peer-to-peer; intranet
3. Network communication standards
4. Network hardware and software
5. Transmission media
6. **Network security**
7. What types of physical security measures can be put in place?

Concealed within locked rooms, well ventilated and air conditioned, alarms that trigger with unauthorised entry, having a UPS and halogen gas fire extinguisher system.

**Usernames and passwords**

1. Recommend a password strategy that an organisation could use to avoid unauthorised access to the network.

By using a random generator to create password that are changed every 2-6 months, that are more than 8 digits, including non-alphabetical characters.

**Firewall**

1. Describe the nature of a firewall.

A combination of software and hardware filtering data through an internet connection into an organisations internal network.

1. What are the main purposes of firewalls and how are these purposes achieved?

It Blocks access to certain domain names, banning certain protocols from accessing servers, all data has to travel through the firewall making it so that they are filtered.

1. Why do firewalls use 2 separate NICs?

It separates the connection between the internet and the network making any data travel through the firewalls filter providing safety.

**Malware protection**

1. What is malware and what strategies are used to protect against this type of software?

Malware is malicious software.

To protect against this sort of infection in the computer use virus protection software and firewalls.

**Encryption**

1. What is encryption?

It is the process of transforming data into a gibberish that can only be read by computers that have they key.

1. Describe the nature of WPA or WPA2.

It is the security protocol for use by wireless lans.

1. What is encrypted data known as?

ciphertext

**Secure Websites**

1. Describe the secure protocol to allow secure financial transactions across the internet.

Https

1. What is digital identification certificate technology based on?
2. Describe the nature of Secure sockets layer (SSL) protocol.

The ssl enables the browser to use an encryption code on the data

**Physical design of networks**

1. What is the role of a network diagram?

To show the physical design on the network.